

**Appendix B: Clean Copy of All Claims Pending After Entrance of the Present Amendment
and Response to Office Action**

1. A method of producing an edible plant whose edible portions comprise nutritionally significant concentrations of Se-methylselenocysteine, comprising:
 - identifying a growth environment containing Se-methylselenocysteine;
 - providing a crop plant having an ability to accumulate Se-methylselenocysteine in its edible portions;
 - cultivating the plant in the growth environment under conditions and for a time sufficient for the plant to accumulate a nutritionally significant amount of Se-methylselenocysteine in its edible portions;
 - and harvesting edible portions of the plant which comprise accumulated Se-methylselenocysteine.
2. The method of claim 1, where the growth environment contains Se-methylselenocysteine.
3. The method of claim 1, where identifying the growth environment includes manipulating the growth environment to increase the availability of Se-methylselenocysteine to the plant.
4. The method of claim 3, where manipulating the growth environment includes adding Se-methylselenocysteine to the growth environment.
5. The method of claim 1, where the plant is a member of the family *Brassicaceae*.
6. The method of claim 5, where the plant is a member of the genus *Brassica*.
7. The method of claim 6, where the plant is a member of the species *Brassica juncea*, *Brassica oleracea*, or *Brassica carinata*.
9. The method of claim 1, where the harvested plant is incorporated into a processed food.

48. A method of providing a nutritional supplement, comprising:
providing a plant that contains Se-methylselenocysteine in its edible portions; and
incorporating the plant into a nutritional supplement.